

The Place of Subjects in the Curriculum



Effie G. Bathurst

Paul E. Blackwood

Helen K. Mackintosh

Elsa Schneider

Bulletin 1949, No. 12

FEDERAL SECURITY AGENCY • OSCAR R. EWING, *Administrator*
Office of Education • EARL JAMES McGRATH, *Commissioner*

THE AMAZING CHANGES in everyday living during the last half century are a household and community commonplace. But people sometimes forget that schools too have changed. Teaching the "3R's," for example, is, I am told, a very different process today from the traditional emphasis on "reading, writing and 'rithmetic"—and the other school subjects of our own childhood. Our growing recognition of each child as an individual—a person in his own right—has shifted the emphasis. Schools realize today that their first job is to teach *children*—but subject matter still has an important place in the substance of what children learn. The Office of Education has prepared this bulletin in order to help answer the question of where and how subject matter contributes to today's school program.

Oscar P. Ewing

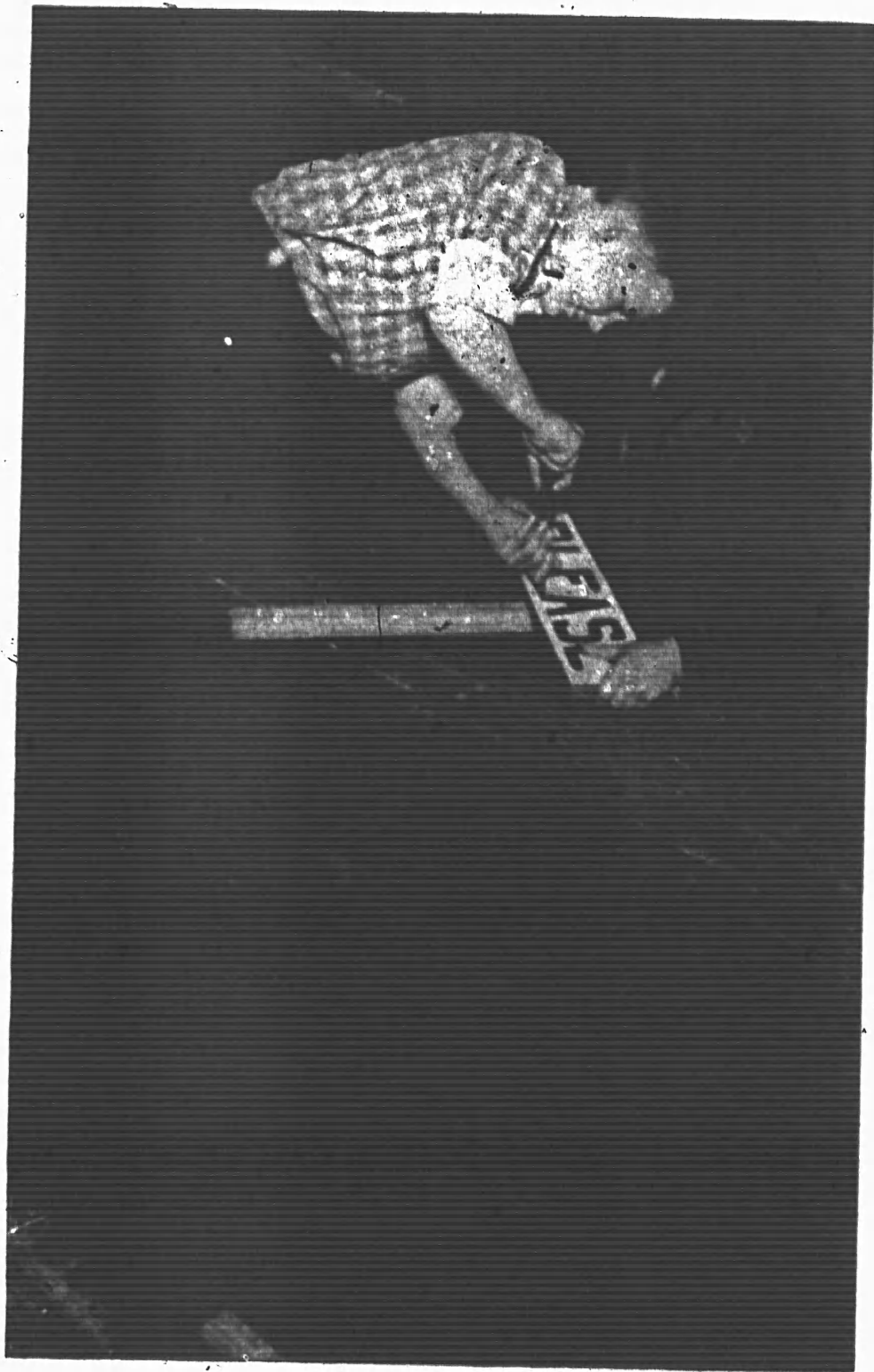
Federal Security Administrator

FOREWORD.

THIS BULLETIN is for those who sincerely want to understand the nature of a modern elementary school program. It presents a point of view, offers many illustrations of what happens in a classroom in the course of a school day, and interprets what children do, say, and learn as they work together with their teacher. Education should consist of meaningful, purposeful experiences if it is to be of practical use in everyday life, and if it is to have permanence. Such experiences that have real meaning for children and for which they can see an immediate use, rather than subjects as such, form the basis for teaching and learning in the modern elementary school. Through continuous planning, the curriculum of any group of children in any year becomes rich, broad, and practical.

To a person studying this bulletin, I would recommend a visit to a classroom in the community that is recognized as using modern school methods. There the learning experiences will not be exactly like the ones described here, even though the visit is made to a fourth grade. But in visiting, one would have to look for underlying principles that are present in good teaching and learning. Some of these principles are brought out in the pages that follow, in the comments of a visitor, and are then pulled together in the form of brief interpretive statements which show that the child is more important than subjects. A visitor to a real school would keep these principles in mind while observing what children do and say, and would try to make interpretations of what the school is doing for children through a program of meaningful learning experiences. Subject matter is there, but in a different relationship and with a different purpose from that of the school of an earlier day. This bulletin may help to give an understanding of the point of view which the good teacher of today demonstrates, as she works with children to develop a worthwhile educational program.

BESS GOODYKOONTZ,
Director, Division of Elementary Education



"We all have chores to do in a clean-up, fix-up campaign."

The Place of Subjects in the Curriculum

WHAT GOES ON in a modern classroom? What are the children learning? Are they studying arithmetic, reading, geography, history, and civics? Are they learning to spell, to figure, to write so you can read what they write and to speak so you can understand what they are talking about? Do they use textbooks? Is there discipline in the classrooms? Are the children learning to get along together? To be good citizens? To live healthfully? To use their unscheduled time in good ways instead of getting into mischief? What does it mean when people say, "Children's needs have to be considered"? Why is there so much talk about homework and marks or grades? And what about this newfangled business which says that parents and children help teachers plan the school program? These and other questions so often asked are answered in part in this bulletin.

In the pages that follow, a day with a group of real fourth grade boys and girls is described. Along with the story of what the children did goes a running commentary explaining what these experiences mean, reasons why things went on as they did, some of the advance planning on the part of the teacher, ways in which the children and teachers planned together, and ways this group of nine- and ten-year-olds are learning to meet and solve problems which confront them. Each situation in the story with its interpretation needs to be read in sequence before going on to the next one. Then there is a summarizing statement which points up implications for those who teach children and for parents who wonder about the quality of the school program, which may be different from the one they experienced.

Let's look in on the children!

A Day with a Fourth Grade

Things the teacher and the children do

Some of these children arrive as early as 8:50. The classroom is big and pleasant in a way that children like. Materials offer opportunities for play and work. Several children have arrived early and are engaged in useful activities of many different kinds.

The teacher does her share of preparing the room for the day. She moves chairs around certain tables, lays a book on one child's desk, a map on another. She adjusts the modern lighting, so as to make the children more comfortable and protect their eyesight.

Children have their part in the housekeeping. Some water plants. Others arrange a rock collection. A boy posts a chart on the bulletin board.

Some children work at tables, others at their own desks. They can work at either, depending on the job to be done. The desks fit the children and are adjustable.

The boys and girls move the desks about, easily forming small working groups. With walls and ceilings

A visitor thinks, it through

This room is right for the children to work in. It satisfies the health standards that our teachers' committee worked out with the PTA. It offers the freedom and security of home; but it's like a workshop, too, convenient and efficient. Materials are handy. There's a good variety.

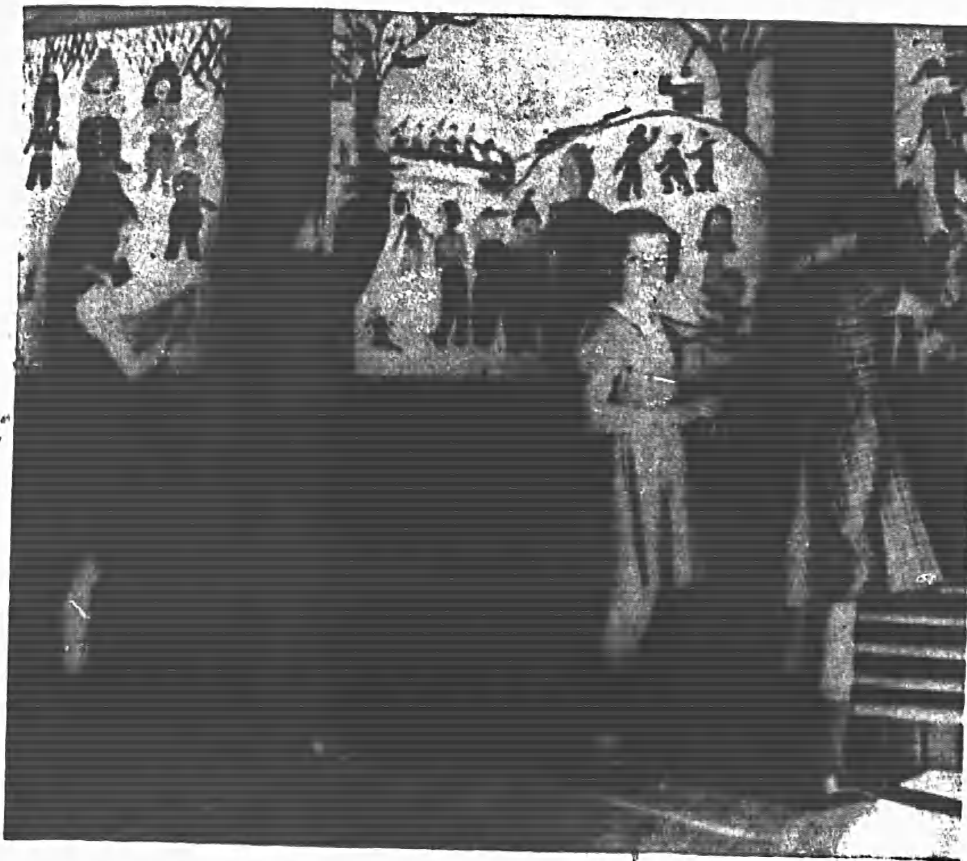
This teacher is alert to the children's needs. She expects that several will want to work together at that large table and so has it ready for them.

When a child knows that the teacher has selected a book or a map especially for him, he feels confidence in her interest. In this way, also, the teacher can help boys and girls overcome individual difficulties.

Good housekeeping means more efficient work. Doubtless teacher and children together have planned who will be responsible for each task.

The equipment is appropriate. Furniture in children's sizes and adjustable to individuals is needed for complete comfort. Blackboards are low enough. Radio and record player are where children can operate them.

It's good to see that the room arrangement is flexible. Furniture must be moved about if it is made to serve



"We planned this snow mural together and everyone works on it."

*Things the teacher and
the children do*

treated so as to deaden sound, the children can move about quietly.

*A visitor thinks
it through*

either the group as a whole, or small committees, and if the room is to be used for different activities, such as committee work, a square dance, or a play.

A delightfully childish mural placed low on one wall shows snow-laden trees and shrubbery along the sides of streets that are being cleared by modern machinery.

In murals, children can express their feelings and get their ideas across to one another. This mural is about things that are familiar to the children—the snow on trees and the snow plow—a good way for children to get real feeling into their art.

"The trees with snow on them are awfully pretty," says Betty.

The children are learning the first steps in evaluating. They meet only the

340365-49-2

*Things the teacher and
the children do*

"That snowplow's doing a swell job," Jack remarks. "I wonder how Ned could draw it so it really seems to be moving there on the wall?"

A pictorial industrial map of Illinois shows general farms with hogs, sheep, and chickens; dairy farms and milk trucks; industrial products, such as tractors, automobiles; mining towns; railroad trains; airports and planes.

Around the edge of the map are postcard pictures to show the covered wagons of the first settlers, episodes of settlement, early towns, Indians. The work on the map has all been done by the children.

On a table in one corner of the room stand two cages of white mice. Columns of figures evidently prepared by children, together with items of actual food consumed by the mice are tacked on each cage.

*A visitor thinks
it through*

standards that they can really see the need of at the time; that is, the picture is pretty and it has a feeling of movement.

The children are interested in the development of their State. They must have read easy geographical material in order to have the understanding of their State which this map shows.

Apparently they are interested in Illinois history, too, although children at this age are not expected to study much history as such; the map's border indicates a fourth grade's interest in local history which will provide a background for using history to help them understand State, national, and world problems. It would be good if this activity could lead the school or the parents to see that the boys and girls have a chance to take some trips—thus getting some first-hand experiences with the geography and history of their own environment.

This is really a study in the science of nutrition. It may be useful out of school as well as in school; that is, if these columns of figures and items of food are evidence that the children are comparing the effects of different diets on the mice. The boys and girls talk about the kinds of foods their pets require to make them strong and healthy. This leads the children to talk about what people eat. Then they

*Things the teacher and
the children do*

*A visitor thinks
is through*

begin to understand that there is *relationship between what people eat and what they are like, and they become intelligent about their own diets.*

A second table holds a globe, railroad folders, travel maps, and an atlas on one end; and on the other, samples of wood, a few of which are tentatively identified according to hardness and appearance of grain.

A showcase holds neatly arranged shell and rock collections, labeled in handwriting, not by an expert in a museum, but by boys and girls.

Meanwhile other pupils arrive and go about the tasks which seem important to them.

Three children are working with flash card numbers while they are seated around a table. These children are paying particular attention to 9-3, 7-2, and 8-5.

The purpose of these *geographical materials* is more than display of things to read or identification of samples of wood. They are organized for use in connection with the children's activities in handcrafts. When the children are older, they will have use for much more geographical information. It is good for them to have this beginning.

Here's an opportunity for boys and girls—to learn how to arrange and label their collections. Ability to organize materials for interesting reading and study may mean the difference between a hobby that continues through life, and one that dies because it ceases to be interesting. Work like this is an incentive for children to learn to write legibly.

No time is lost. Evidently the children have planned together.

These children are working in this small group because they all have the same three combinations to learn. If George needs to learn 9-3 is 6, he should practice on that exact fact. Practice on some fact which other children need will not improve his knowledge of 9-3 is 6. In other words, *children practice the skills they need as individuals.*

*Things the teacher and
the children do*

At the cages which house the mice, two boys are weighing the mice, recording their weight in a record book, and feeding them. The diets for the mice in the two cages are different.

Two girls are observing the work of the boys at the cages, and one of the boys explains:

"We'll have to keep up this experiment another week if we want to see any changes in the mice. That's what the instructions say. You girls can take over tomorrow. All you have to do is give them the same food each day and weigh them. You have to be careful to get the figures right."

The boys and girls continue to arrive, one at a time and by two's and three's. The group is a typical fourth grade. Some of the children evidently are friends — neighbors, perhaps. Some enter the room alone and seek companions. Others remain alone and go to work by themselves. There are tall children and short ones; boys with their hair plastered in place; others with unruly, and perhaps uncombed, hair; girls with ribbons and girls with braids; children with blue eyes, others with brown eyes or gray eyes. They take up different tasks, different books.

It is now 9 o'clock and all the pupils of the class are in the room.

*A visitor thinks
it through*

Activities which continue over a period of time sustain the children's interest in the learning required for successful results. The mice experiment probably means an incentive for reading as well as figures, and an opportunity to learn a little bit about scientific procedures.

Children learn from one another.

This experiment can lead the children to study about the kinds of food that they themselves need, and perhaps to find which of their food needs are met by the things they eat.

The children are different physically and socially; and emotionally and mentally, too. When one looks at children and listens to them, it's easy to see why you cannot educate them all with the same curriculum, the same methods, and the same experiences.

From previous experiences, the children have learned to work independ-

*Things the teacher and
the children do*

and busy. Informal conversation and discussion between the teacher and children wanting help in answering questions, characterizes this early morning interval.

Shortly after 9, at the teacher's suggestion, the children move their seats into an informal semicircle for discussion.

The teacher calls the group's attention to the problem which they planned yesterday—to gain more information to help them select wood for some things they want to make. She suggests that since this is one of their first experiences in working with wood, they may also want to try to find something about it that is interesting to study at some length.

The children have brought to class samples of oak, walnut, hickory, white pine, and gumwood to add to the samples on the table.

Ben says, "I'm going to put a new handle in my mallet. There's wood for one in the shop. It's hickory—see?—like this piece. It's tough and hard."

"I like white pine because it is soft and easy to saw and carve," says George. "I'm making a horse's head for my little brother to play with."

*A visitor thinks
it through*

ently. Ever since they entered school, these same children have been working and playing together. Their ability to plan, to choose activities, to budget time, to work under their own steam are rooted in democratic experiences which a fine teacher has helped them have each of the years they have been in school.

Movable seats are again an advantage. For a discussion, children face one another as well as the teacher. Each person's remarks are important to all, not just to the teacher.

The children have an immediate purpose, and with the teacher they seek to extend it so as to get more pleasure and satisfaction out of it by using information from the field of geography.

Something to look at and feel and work with makes study more interesting.

All children enjoy making things out of something. Some have decided what they are going to make and what kind of wood they will use. Others hardly knew what they will make and the woods all look alike to them. A few have real liking for wood as a material to make things of—the way they admire it shows that. In the course of a year they probably will get experience with

*Things the teacher and
the children do*

Ed thinks walnut is prettiest. "Walnut has a shadow in the grain," he says. "I'm going to make my paint tray out of walnut."

"Walnut costs more," says George.

"My dad says walnut is scarce," says Elmer. "You could hardly buy it during the war."

John, whose uncle is a forest ranger in Oregon, says all wood is getting scarcer than it was once.

"There's lots of wood in our park," says Betty.

"But not enough for all the things made of wood," answers John. "Like houses and furniture and boxes and toys, in all the cities and on the farms. Just think! And besides people are not allowed to cut the wood in the White Pines Park."

"Then where does all the wood come from?" asks Betty.

"From forests," says James, who used to live in Minnesota. "The wood comes from them. Forests are in—well, everywhere, I guess."

"Well, not quite everywhere. Maybe some of us would like to study about forests," says the teacher. "When you read your geographies and other books to get the facts, you can tell us where they are, how the trees are made into lumber, and how they should be cared for."

A number of the children say they would like to do that. They mention phases of a study of forests in which they are especially interested.

*A visitor thinks
it through*

clay, food, cloth, reed, paints, and other materials, too.

Only some advance experience is likely to cause a child to think of scarcity of materials at this age, but the teacher is quick to allow John's special knowledge to be passed on to his classmates. Conservation of our natural resources is a geographical concept that can be emphasized in many things the children do.

This is a lead from a child which may carry the study into geography of the United States.

The teacher steps in to point out the need for study, and discourages careless thinking. Geographies become important when the children use them for something they really want to find out.

Since the children are allowed to share experiences it is not necessary or desirable for the entire class to have the same assignment. The children have



"In committees we plan and work on problems which are important to all of us."

*Things the teacher and
the children do*

*A visitor thinks
it through*

different kinds of geographies, encyclopedias, and other books. This is a way of meeting individual and small group needs.

As would be expected, James says he wants to learn more about logging and will write and ask his friends to tell him some of the facts that he cannot find by reading.

"My uncle is going to visit us pretty soon," says John. "I can ask him to come to school and tell about how he has to be on the lookout for forest fires."

"Will he tell us how he puts them out?" asks one of the children.

"I guess so," answers John. "But mostly he tries not to let them get started. Lots of people help him."

This boy makes use of his knowledge gained outside of this community. It will be a good experience in letter writing, as well as in penmanship.

The uncle is a specialist. Children learn respect for scientific knowledge.

*Things the teacher and
the children do*

Elmer's parents own a farm. In the summer his family lives there. His father has started a woodlot to keep the soil from washing off a slope in a certain pasture.

"Birds go there," Elmer says. "The County Agent got Dad to plant the trees. Grass and flowers grow there, too."

"Let's call the folks who want to study about forests Group ONE," says the teacher. "Now is there something else that you can see needs to be done? These children can work as Group TWO."

"Well, somebody's got to finish labeling all the samples," says Andy. "Somebody that can spell the names right and make the letters so that we can all read them."

Most of the children decide that they want to be in Group ONE to study forests. Four others agree to do the labeling. The teacher suggests that Don and Edith, who have volunteered for Group ONE plan instead to use their time in finishing their report on a problem the class had been studying earlier. She urges one of the children who volunteers to label wood samples to join Group ONE, and a child who had not responded to join Group TWO.

The children pass the samples of wood about the class. The pieces are cut in different ways. Some show the grain in cross sections. Others show lengthwise markings.

*A visitor thinks
it through*

This is the beginning of conservation — understanding that people can do something about protecting the resources that keep us alive, and that there's probably a balance in nature that must be preserved or compensated for.

The teacher is helping the children get the feel of organization, at the same time keeping plans flexible and including the children in the planning. *Learning to work in committees leads to self-direction.*

Merely being on a committee group is not necessarily a good thing for every child. The teacher uses her judgment as to the needs of each child and helps the children make choices which give them a well-rounded school experience.

*Things the teacher and
the children do*

*A visitor thinks
it through*

One of the children notices the rings of growth in a crosscut piece and asks what they are.

The teacher says that some of their books on science tell how a tree's trunk and stems are made with little tubes so that liquids can go up and down to carry food. Every year a new layer of tubes grows, leaving last year's layer as part of the wood, forming rings of growth. In a cross section of the trunk you can see these rings. Children decide to select some of the pictures to throw on the screen.

She lays out several books, and then says, "Betty, you may want to borrow a book from someone in the fifth grade to answer some of your questions about the way trees grow."

The teacher asks the children to list the books where they may expect to find facts to help answer some of their other questions. Library books, geography and science books by different authors, encyclopedias, travel folders, some State and Federal bulletins with many pictures, and children's encyclopedias are mentioned.

James offers to share a book which has a chapter on logging. Some children use their textbooks, some use other books; to answer questions, to

The children have a question and the teacher helps them recognize the field of knowledge that will help them answer it by suggesting their science books. Children often have problems that require facts from many different subject fields. Every day many subjects may be studied. On the other hand a subject is not forced into the program if it is not really needed even for several days. As the teacher studies children and the life needs they have in the community in which they live, it will be necessary to help them draw on all the subject fields time and again in the course of the school year.

Maybe Betty is a child who needs the challenge or satisfaction of using a book which is considered a step ahead.

It is more important to know where to find facts than merely to try to memorize them. It is good for children to become familiar with many sources of information.

Materials brought from home are helpful. Schools can use books, crafts, food, anything that makes studies more interesting and more meaningful.

*Things the teacher and
the children do*

learn steps in a process, to get information from pictures, to prove a point, to locate information for committee use, or to get facts from maps and charts.

After most of the children have begun individual and small group work, the teacher suggests that, now, she would like to work with some of the children who were needing special help in reading. During this time the other members of the two groups can do some of the reading required to answer their questions.

She asks two of the boys to come to the blackboard where eight sets of phrases are written, and explains that she has a game for them that will help them to read groups of words faster and at the same time understand what is read. "Reading is more fun when you can do it fast," she says, "but it is important that you don't miss out on the meaning."

She gives the boys a set of pictures numbered to correspond to the sets of phrases. After they have studied picture 1, they read rapidly to select the phrase from the number 1 list on the blackboard that will make the correct title. They do the same for each of the other pictures. The teacher helps them check for correctness.

The teacher now asks another small group to move near the board where there are written six phrases or topics suitable for subtitles for the six paragraphs in the chapter on

*A visitor thinks
it through*

Textbooks are one quick and convenient source of information. But the children's sources of information are not limited to textbooks. Pictures, movies, radio, storybooks, reference books, and persons are consulted.

The teacher provides opportunity for practice to improve skill in reading for those who need it, while those who do not need it work on what is important for them.

Children will need to look carefully and be sure that the title makes sense. Such practice calls for using good judgment.

This is a small group of children who are advanced in reading. New skills are introduced to small groups at a time. This group is being prepared to learn how to outline information so

*Things the teacher and
the children do*

logging in the geography. The boys first discuss what seem to them the important points of the chapter. Then the teacher calls their attention to the topic headings on the blackboard and asks the boys to name the paragraphs which they believe the topics best fit. She asks one member of the group to mark with / the topic which best fits the first paragraph. Another boy is asked to mark with // the topic which best fits the second paragraph, and so on.

When all are marked, the paragraphs are read aloud, one at a time, to see if the children agree on the choices of topic headings. They are invited to suggest better headings if they have found any. She calls the children's attention to the fact that the topic headings really form an

*A visitor thinks
it through*

that they can use outlining as a working tool as they get information from a variety of sources in the solution of specific problems.

When the other children have a use for outlining, it will be taught. The smaller the class, within reason, the better the teacher can meet needs and interests of individuals.



"At first I couldn't do the low one, but tomorrow I'm going to do the high one."

*Things the teacher and
the children do*

*A visitor thinks
it through*

outline for the chapter. They will find such outlines helpful when reporting to the class some of the facts they've read.

When most of the children have completed their tasks after about 20 minutes of independent work, the group arrange their seats in the informal semicircle again to share some of the things which they have learned and to decide what ought to be done next.

One of the boys announces that three of them have prepared a quiz for the group. The teacher invites them to take charge. They ask such questions as, "What wood makes the best boats?" "Why?" "For what besides firewood is the wood in our community suitable?" "What good are trees if you don't ever cut them?" "What kind of wood do we have the most of?"

Following the quiz, a guest, one of the parents who had dropped in, remarks that the only stand of white pine in Illinois is the one at White Pines State Park, not far away. She is invited to return and tell about the park after the children's gym period, which begins now at 10:15.

Today the physical education will consist of games in the gymnasium. Apparently an argument arose yesterday in the gym about the evenness of teams. So today captains are selected and evenly matched teams are organized before the pupils leave

Children have the experience of sharing ideas in a large group.

The quiz is an example of a small group's sharing something with a large group in an enterprise in which all are interested.

Here the local specialist has additional knowledge and the boys and girls welcome it.

The children are getting needed physical activity and are having fun. The instructional period in physical education, in addition to informal recreational opportunities, helps the children build total physical fitness as well as skills. This will help them enjoy a

*Things the teacher and
the children do*

for the gymnasium. The plan for today is to have relays, a few self-testing activities, then to play soccer baseball. The teacher follows the class to the gymnasium. The children play enthusiastically and enjoy the fun and activity.

Phonograph records are played while the children change from gym shoes to street shoes. Returning from the lockers the children move about the room and talk together in small groups. All is in good order. As they return to the classroom, they settle immediately to individual projects at their own desks. Some are reading. Others are drawing maps; still others are planning an exhibit.

After the gym period the guest talks about the White Pines State Park at Oregon, Ill. She stresses particularly the way the pines are cared for and kept in a continuously healthy condition. She refers to historical landmarks, interesting history, and Indian lore. She asks the children to describe the location of the park and how it is reached best by auto.

Interesting discussion follows. Some of the children have read about Blackhawk, and they mention the stories of him and repeat a bit of the Indian lore of that fascinating Rock River territory where the park

*A visitor thinks
it through*

variety of physical activities in and out of school. The success of today's play period shows the value of the children's planning. And it shows what profitable experiences children can have when the school provides adequate equipment and supplies, as well as time, space, and instruction.

It's certainly gratifying to see that the children ~~lag~~ little or no time in changing from one activity to another. Looks as if the secret is to have a full and interesting program, with lots of activities the children find important to do.

Here the children are getting some useful historical and geographic facts which help them to understand better how their State and Nation grew up historically. Next year or the next when the children ask questions about the history of the United States, they will be prepared to understand the part which their own State has had in the development of the Nation. They really listen intently when a person with rich experience talks to them.

This teacher recognizes that the children will remember the interesting facts of local history better because it is told to them by someone who knows about it. Besides, many of the facts they are getting could not be found in books.

*Things the teacher and
the children do*

is located. One boy even knows who General Stillman was, and about his famous defeat.

A boy says the children in the other rooms would like to know about the park, too. The children decide that they will make a book on the park to share with the other pupils and their parents.

The possibilities of a group excursion, or, at least, family trips to White Pines State Park are discussed. On both geographic maps and road maps, the children locate White Pines Park and the towns along the way. Routes and directions are discussed. Then one boy suggests that the children talk to their parents about the possibilities of trips and get their advice. They decide to ask each of their families to get a collection of road maps, travel folders, songs to sing, and stories to tell while traveling. They decide also to ask their parents to help them with further plans for making a trip.

The children go home for lunch at 11:30. They all live nearby.

As the children return from lunch at 12:50, or before, they take up their work with much the same freedom, informality and business-like attitude that marked the morning. One boy, though, looks glum and

*A visitor thinks
it through*

So this contribution by a person who is not a class member broadens the school program and illustrates a way of bringing the school and community closer together.

One thing is certain, the education of these children is not confined to the school day. Their plan to talk with parents shows their awareness that parents have much to contribute both to school and family activities. Here is a kind of homework which is of real interest and value to the children; it is probably worth more to them than memorizing arithmetic facts or answering questions at the end of a chapter.

One of the values of the neighborhood school is that children can have lunch at home, or have the benefit of school and home cooperation for a nutritious lunch at school.

Boys and girls don't waste much time when their work is interesting and they have helped plan it.

The teacher understands that children have emotional problems. She knows that this is not the time to call attention



"I read something new every day, when we have a chance to read by ourselves."

Things the teacher and the children do

sad. As he sits moping, it is obvious that he is emotionally upset. (The teacher explains later that he lost a library book, but class discussion showed she and the children are going to help him find it later.)

This is a quiet time for reading. The children get out their library books and become absorbed in them.

The children ask the teacher for help when they need it. When necessary she uses the blackboard in answering some of their questions. She uses chalk, not just talk, to explain, sometimes sketching a picture to make the meaning clearer. The teacher doesn't hurry a child or make him feel uncomfortable because he asks for help, but she does make sure that he feels satisfied.

As she walks around, the teacher helps the children when necessary. She knows the children and is conscious of their individual problems.

The physical education teacher has promised the boys that at 1:10 he will help them with some stunts and pyramids for the Father-Son Play Night.

A visitor thinks it through

to the boy's problem. With the help of the teacher and children he will soon be back at work with the others.

It's obvious that the children have been guided and encouraged to select books which they will enjoy. The teacher and the librarian have helped them develop a taste for a wide variety of books. *With guidance and plenty of books to choose from children can find books that are interesting, stimulating, worthwhile, and easy enough to read.*

When children have a favorable attitude toward reading, they overcome reading difficulties through word analysis, attention to content, and phonics. Not all children have difficulties. Those who do are helped to look carefully at words that cause difficulty, and to analyze them in order to see what parts are familiar, what parts are new, and where phonics will help. Frequently a question from the teacher helps a child get the meaning from the context.

Those who have the habit of reading only one word at a time are helped to get the meaning of words in groups and to form the habit of reading by thought units.

Periodically the boys of this school invite their fathers for early evening recreation in the school gymnasium. They have father-son teams in a variety of games. Sometimes the boys plan a program built around activities they

*Things the teacher and
the children do*

The girls gather in a circle in the front of the room. On a table there, the record player, several records, and a number of poetry collections are ready for use. A child brings a small book of poems the children have written. A number have tried writing poems, and it looks as though this study will help them be more creative. (Ordinarily the boys are included in this group.)

The girls contribute to this sharing period in a variety of ways. Some repeat or read poems they like. Others have books in which they have discovered short rhymes they especially like because they are funny, or have a lovely thought, or a fascinating jingle, or rhythm, and they read or repeat these to the class with confidence and pleasure.

One girl asks to read a poem she has written. Another suggests that the members of the group try their hand at writing original poems.

*A visitor thinks
it through*

learned at school that they want their fathers to see. When the boys want help with skills they need to work on, the teacher calls on the physical education teacher who can help them more than she can.

The children have been studying poetry for several days. The teacher is providing opportunity for them to enjoy and evaluate one form of literature. She selects material on the basis of interest and stages of development of the children. *Reading for pleasure makes use of skills that have already been developed and provides the practice which makes for greater enjoyment.*

Using a variety of selections, the girls are learning to appreciate and enjoy poetry. They are building a basis for doing some creative writing, too.

The teacher welcomes this suggestion, but she does not push it. Probably she thinks creativeness cannot be forced. Unless children develop sufficient appreciation of poetry, many of them will not feel free or confident or comfortable in expressing their thoughts. From the comments the teacher makes, it is evident that her idea is to provide many enjoyable experiences in reading poetry and listening to it before she encourages original writing.

*Things the teacher and
the children do*

Next, the girls listen to phonograph recordings. There are two records made by the school librarian. Two of the girls in this class were among the children she asked to help her select poems to record. One record is a collection of winter poems including "Stopping by Woods on a Snowy Evening." The other record introduces the group to similes and metaphors, not by name, but, in this case, as ways which the poets used to express beautiful thoughts. Their choice is "Moon Folly" by Fannie Stearns Davis.

One distraction occurs. Two little girls are overcome with giggles. After several casual corrections, Miss Thomas finally suggests that they leave the group if they are not interested. At this the girls break down and confess that they are laughing at a slight mishap to the teacher's dress. "For goodness' sake, why didn't you say so?" is Miss Thomas' only remark as she repairs the damage. After that everyone gives her attention to the poetry.

Then the group turns to the books of poetry on the table to read aloud together. There are enough books for each two children to have one. Sometimes the teacher reads while the girls listen, following in the book if they choose. Now and then the teacher and children repeat lines together. Once the group reads a short poem in unison. Betty asks to read a favorite of hers to the

*A visitor thinks
it through*

Children's interest in reading is increased through listening. As they listen to good oral reading, to records, radio, and movies, the teacher can help them develop standards for improving their own ability to read aloud.

When teacher-pupil relationships are right, children and teacher can behave naturally in awkward situations. They can accept the fact that accidents happen because we are all human beings, whether teacher or children. The teacher does not permit disorder and is firm in correcting what she thinks is disorder, but behaves naturally when she understands the complete situation.

Children get practice in reading out loud. Some unison reading is done. It is probably a good idea when used with discretion. Those children who don't like to read aloud because they don't feel that they do it well can get the swing of the lines in reading with others and forget themselves. Once they gain some ability through practice in a situation in which they feel secure, they may have courage to read aloud

*Things the teacher and
the children do*

group. All are interested and enthusiastic until the end of the period.

The boys return to the classroom at 2 o'clock. Without any fuss or bother, desks and chairs are rearranged, and the whole group begins to discuss the problem of paying for the wood which will be needed in the craft shop.

Since the wood which most of them are using is for articles such as bookends, trays, wood carving, toys, shelves, and game boards, an explanation of square inches, square feet, and board feet is needed. In order to figure cost, the children need two concepts of area and some fractions which are relatively new to them.

Pieces of white pine are on hand to demonstrate with. Three boards each represent a board foot. One is 12 inches square and 1 inch thick. One is 12 inches square and about half an inch thick. Another is 24 inches long, 6 inches wide, and 1 inch thick. The teacher tells the children that in figuring cost of wood 1 inch or less in thickness they will need only to pay attention to length and width.

Sections are at hand, cut ready to be placed on each of these boards to represent $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{8}$ of a

*A visitor thinks
it through*

by themselves. And a choral speaking group—which reads poetry in unison—may come as the result of these experiences.

In connection with their craftwork, which most of the children like, they will have a strong incentive to learn the arithmetic they need in computing the cost of the wood they use. *New concepts are learned best in the real-life experiences in which they are really needed.* In this connection the teacher knows children will need to understand something about board measure and to develop some facility in working with fractions.

The children have boards to look at, to handle, and to measure. *Learning is more effective when more than one of the senses is brought into use.*

From the remarks, it is apparent that the children have had experience measuring feet and inches, and they

*Things the teacher and
the children do*

board foot. The pieces of wood are passed about the class and the children examine the sizes, measure the pieces with their rulers, and talk about the square inches which each contains.

After a brief explanation, the teacher presents a few simple problems, that can be solved by mental calculation rather than with pencil and paper. She helps the children by saying, "For example, take this board that is 6 inches long and 3 inches wide. Can you figure what part of a board foot it is? Maybe it will help if you think first how many square inches there are in this piece. How much is it worth if the wood is white pine worth 40 cents a board foot?"

Or, "Suppose John needs a piece of walnut 3 feet long and 6 inches wide. How many board feet will he have to buy?"

The teacher asks Ned to tell the class about his project so that the group can figure the cost. He is making a gameboard out of white pine. It is to be 9 inches long and 8 inches wide. He has learned that soft white pine costs 40 cents a foot. His problem is to find out how much the wood in his gameboard will cost. When one of the girls gets the answer, the teacher asks her to put her work on the

*A visitor thinks
it through*

have had some experience with square feet and square inches, probably when they blocked off and enlarged the pictorial map to help them understand some of the geography of Illinois. Now they need to use a new type of problem in square feet. In learning new concepts, children build on familiar experiences.

Some children can estimate before they are ready to handle figures. Later they will learn the way to compute the areas exactly.

Children make their first try at the process on a real problem. A child gives the problem and the teacher demonstrates with the class the steps in working it. A real problem makes learning more permanent.

*Things the teacher and
the children do*

blackboard and tell the class how she did the problem.

Teacher and children read some similar problems that one of the children has placed on the blackboard. They make suggestions for working them, and then each child works the problems on paper. The papers are checked, corrected, questions asked, and further explanation is given as needed.

When the children seem to understand the arithmetic work, the teacher suggests that they take up the latest issue of the Lower School newspaper, *Highlights*, which is just off press. It is now 2:40. Copies are passed out and read silently. A lively discussion follows the reading. Naturally, the children are most interested in the articles written by members of their own group. This particular issue is compared with previous issues.

"I like Mary's article about our trip to the market," says Ben. "It's really on the beam there where she tells how fast that load of Christmas trees was sold."

"She makes us see the people buying, doesn't she?" suggests the teacher. "I guess she could see them with her mind's eye while she was writing. She made notes while we were visiting."

"Our sports page has more pictures than it had last week," Nancy says. This entire group is responsible for the school sports page. To write

*A visitor thinks
it through*

Children recognize the need for skill that goes beyond mere understanding of a process. They work the practice problems with interest as well as understanding.

Here is another example of children developing ability in reading, and writing. Use of material from the school environment arouses their interest and is a special incentive for them to read and write.

This newspaper which actually gets into print and is circulated to other children and to the homes is one of the best ways of getting children to spell correctly, to write legibly, and to use complete sentences, needed punctuation, and capital letters.

The children are looking at their own work critically as they read, discuss, and judge the quality of writing which appears in the paper.

In a sense, the children are competing with themselves rather than with other children as they work to improve their written expression.

*Things the teacher and
the children do*

it, several children have interviewed the other grades of the school. As they report the news to their classmates, all have suggestions for the write-up, which is written on the blackboard and then revised.

"Pictures are a help," the teacher says, "but writing is important, too, and I like the way you expressed your sentences. They are short. The page reads smoothly."

Several children mention places in the paper where improvements can be made.

They talk about news for the next issue.

"We can write about the park," says Tom, "and about the book we are planning."

After the paper is read, the teacher suggests that since it is now 3, it might be wise to think about plans for tomorrow. She congratulates the children who had done the house-keeping chores (watering plants, arranging the rock collection, etc.) this morning. The children then look at the names on the board to see who will be responsible for these chores tomorrow morning. "Since some of you have no self-assigned chores, what are you going to do when you arrive in the morning?" the teacher asks.

"We are going to take care of the white mice the rest of this week," says one of the girls to whom the boys had given that responsibility.

Other children indicate ways they

*A visitor thinks
it through*

While the children gather news for the school newspaper, they learn to meet children from other rooms, and sometimes adults. This gives them an opportunity to learn how to question and talk with others courteously and without embarrassment. The free give-and-take as they write up the news they gather helps these children to think clearly.

They are looking at one another's best efforts and are learning to judge and appraise a cooperative undertaking. Looks as though they are really learning to accept and evaluate criticism to improve what they do next. The satisfaction that comes from doing something well is a much better incentive than a mark on a report card!

Planning for tomorrow's activities involves evaluation of what has been accomplished already.

The children will tend to feel a security in coming to school and in beginning their school day when they know approximately what they will do upon arrival.



"We have time for a square dance before we go home."

*Things the teacher and
the children do*

expect to occupy themselves upon their arrival at school. The teacher and children make suggestions of things to do to the ones who have made no choice.

"Now what are some things we need to do during the day?" the teacher inquires.

"We will need to discuss what we found out from our parents about trips."

"And maybe plan a trip if it looks O.K."

"And decide what is best for the committees to do next."

The children and teacher agree to use their discussion period to consider these things.

*A visitor thinks
it through*

Each day's activities, in part, grow out of the preceding day's work and accomplishments. By thinking about tomorrow's activities in terms of the suggestions of the children, the teacher can make a plan which more nearly fits the needs of the group.

*Things the teacher and
the children do*

"Also," the teacher says, "we should work some more on arithmetic problems like the ones we did today."

One of the girls suggests that they need to begin interviewing other pupils and writing up their news items for the next issue of *Highlights*. Another urges that more time is needed for individual research on previously planned questions. Still another suggestion is, "Can't we learn some new songs tomorrow?" After some discussion the teacher suggests that they write on the board a summary of their proposals for tomorrow.

The children volunteer the following proposals:

1. Be sure everyone has chosen something to do when he arrives in the morning.
2. Have a discussion period as usual.
3. Work together on arithmetic problems.
4. Have more time for individual reading and research.
5. Have some time for music.

The children agree that this is a fair summary of the proposals, and the teacher says she will follow their suggestions.

The recreation committee takes over after the planning for the next day. They have planned several different kinds of activities. Dicky leads the group in singing some of the

*A visitor thinks
it through*

Here's a good example of children learning to plan together. These boys and girls must have had experience in planning in earlier school years.

Children will assume more responsibility for getting work done tomorrow, because they have had a part with the teacher in making plans for the day.

These children seem to have some idea that it is important to do more than just find facts. They look at all the facts which they can find before forming conclusions. They evaluate information. They check on the responsibility of authors. They compare facts from different sources. They are thus gaining an understanding, as much as they can at their age, of ideas involved in true research.

Ability to enjoy singing together is an important result of instruction in music. Understanding, feeling, joy, appreciation may be other outcomes.

*Things the teacher and
the children do*

favorite songs of the committee members—they are favorite songs of the class, too! John accompanies the group on the piano part of the time and part of the time they sing without music. At the end of 15 minutes the room is cleared for action, this time for square dancing. The record player and records are managed by one of the youngsters. Half the children dance while the others sing, clap their hands, and wait their turns. The first dance is done to the call of the voice on the record. The next to a record without words so one of the boys gives the calls. The boys and girls are dancing with zest and gaiety.

*A visitor thinks
it through*

The teacher knows that physical activity is a must for growing children. The room is easily converted from a sitting to a living room by adjusting the movable furniture as often as necessary. This takes planning on the part of the teacher and children.

*Fun, and even hilarity, are important
in the classroom. They are as much a
part of the day as serious activities.*

Willingness to take turns, to give the other fellow a chance, are by-products of learning to live and work together.

And so the day ends on a happy note!

To Sum Up

You spent the day with the fourth-graders to observe what happened in one classroom as seen through the eyes of teacher, visitor, and children who made a diary record of their day and then looked at it to learn whether it was a true and accurate story. There are many days like this one in some ways, but in other ways quite different. You may want to know the answers to such questions as, "How often do the children go to the craft room? to the gym? Would they have a visitor every day? Would they get as much practice in arithmetic, in reading, spelling, oral and written language, physical education, as they did on this particular day? Would there be a daily poetry period? Would there be as much emphasis on maps and map reading as this day showed? When do they have art experiences?"

There would certainly be other days when each of these kinds of experiences would get attention, but the amount of time or the kind of attention given would vary. Experiences and projects include music, art, and social studies on Wednesday or Thursday, or some other day when there is no poetry. At any one time only a few children from a given group may go to the craft room since it must be available for other classes, too. Special rooms in a building, such as the gymnasium, auditorium, and craft room, should be used as needed and not assigned on an inflexible schedule. They will probably not be used every day by the fourth-graders. The teacher and the pupils plan together for the day, the week, the year. Children have good ideas, but the teacher as a mature person has the responsibility to see that the youngsters do not go off at a tangent, that there is balance and unity in the learning experiences, and that no area of learning is slighted.

The most important point is that the relationship between children and teacher be consistently the same whether we visit the fourth grade on Monday, Tuesday, Wednesday, Thursday, or Friday.

What is happening in the fourth-grade classroom?

We have taken the day apart, now let's put it together again to see the place and importance of subjects. Scattered throughout the story are many mentions of *reading*, particularly reading for a purpose that is real to girls and boys—to locate information, to answer a question, to solve a problem, to check or prove a point, to discover new sources of information, to share good times through poetry, to build an outline, to extend experience, to read maps or pictures, to understand a

process—all these and many other uses. Supplementing reading are opportunities to work with real resources, such as—radio programs, wood, tools, pictures, maps, records, movies, people, science and nature specimens and equipment, musical instruments, and art supplies, which give meaning to what is read. All of these means of making experience real are not used on this particular day, but they are ready when they are needed.

But what about reading, that is the bugbear of parents, teachers, superintendents, and cartoonists? A quick look at the story of a fourth-grade day shows the uses of reading listed above. True, it is not reading of the sort in which every child opens the same book at the same place at the same moment, and listens to some other child 29/30 of the time read paragraph by paragraph while he thinks about the baseball game after school, how he'll spend the nickel in his pocket, whether the teacher will see his high sign so that he can leave the room—all this while he waits his turn. You can put yourself in his place if you can imagine that you and 29 other adults have a copy of the same current magazine in hand, and you mark time as you wait for your turn to read aloud.

The fact that a child or a grown-up can pronounce a word orally, or read a sentence smoothly is no sign that he understands what he reads. The reading that is done in the fourth-grade classroom is reading with a purpose—to get thought from the printed page to use in a wide variety of ways. Each child must be helped with the words that are difficult for him, and each word so mastered will be used as a key whenever possible to unlock new words in whole or in part, as he meets them in his reading. This is functional phonics. There are no rules to which there are not exceptions. The child must learn to get many of his clues to meaning through the context or the grouping of words in which the hard-to-get word appears in the sentence. Furthermore, he must be interested in the reading and should recognize some useful purpose which it serves that is important to him.

There are real-life uses of *arithmetic* in this classroom on our day with the fourth-graders. Children are adding, subtracting, multiplying, dividing as they estimate board feet needed for construction work and figure what the lumber bill will be. They work with whole numbers, fractions, and some mixed numbers; they work with square feet and board feet. Fractions and mixed numbers, as well as board feet, are difficult concepts for fourth-graders, and children will not develop skill in their use until fifth grade or beyond. Research workers who have studied children's ability to deal with arithmetic concepts believe that children learn fractions more easily and quickly if postponed

until they are 10 years old mentally. That is the average age of the fifth-grader. But practical problems give children an introduction to these concepts, and a desire to develop skill in the use of the processes they already know. Certain children practice subtraction facts because a situation as real as figuring their lumber bill, helps them to see that they do not have sufficient skill in using $9 - 3$ or $8 - 5$.

Children are *spelling, speaking, and writing*, although not perhaps in the way children learned these skills 15 to 20 years ago. But the world does move, and education like dentistry, medicine, engineering, and other professions finds new and better ways of teaching and learning. Spelling is of little value if it means that a boy or girl writes down on a sheet of paper 20 words dictated by the teacher, and comes out with all correct—100%. The parent or teacher has no assurance that from such an exercise alone the child will spell any one of these words correctly when he tries to use it in a sentence in his article for the school newspaper, in the title of a picture he has drawn in art, in listing food used for the white mice, in a thank-you letter for a birthday gift, in labeling specimens in a rock collection, in a grocery list, or anywhere else.

Words are as individual as people. A child must learn each word in relation to the meaning or meanings it has for him. School helps him by means of a learning method that asks him to look at the word, pronounce the word by syllables, visualize it as he closes his eyes, spell it to himself, write it, compare it, practice it. As a matter of fact there is more rather than less spelling in today's schools, with some assurance that every child will learn the approximately 3,000 words most commonly used in writing. Outside the limits of this number, he cannot be expected to spell a chance word unless he has had an opportunity to learn it, and a place to use it.

And *handwriting*? A child may practice push-pull exercises, draw perfect ovals, and copy, "The quick brown fox jumped over the fence," until it is perfect in quality. But again there is no assurance that when he is faced with a real writing situation he will write legibly unless he sees the need for clear, easily read writing. If he writes his name to identify his book or the book on which his wraps are hung, if he writes an article for the school paper that must pass the editorial committee, or serves as librarian who records returns and withdrawals of books, or keeps the record of Junior Red Cross membership, or does any one of a hundred other writing jobs, he will practice for a purpose.

Oral and written language are brother and sister to spelling and handwriting. Teacher and children must think of them as belonging

to the same family group. As a matter of fact the fourth-graders combine them all in a school newspaper. They have the best possible practice in oral language when they discuss, plan, and evaluate contributions to the Lower School newspaper, *Highlights*. When they put their ideas into writing they discover the need for correct spelling, clear handwriting, and ideas well expressed. Too, they read *Highlights* after it is published, for where is the person who doesn't enjoy seeing himself in print. A look back through the school day shows other situations, such as identifying samples of wood, planning the gym period, sharing poetry, serving as member of a committee, discussing with the group, and solving arithmetic problems where much talking and some writing are involved. Talking things over helps to have ideas clearly in mind before putting them down on paper.

During this day children draw upon *geography, history, civics—the social studies*—to help them solve problems and accomplish purposes in which they are truly interested. For example, they engage in a series of experiences, including the discussion of logging and lumbering, the uses of wood, reading maps in the location of forest areas and in planning trips, talking about the history of the local community, and estimating the amount of timber available in their own county. Opportunity for use of *science* comes about when children work with wood, talk about the way a tree grows, and about soil and forest conservation. *Health* and *physical education* are used as much or more than usual, and as children enjoy square dancing, they demonstrate some of their learnings as well as their pleasure and enjoyment in this area.

Little mention is made of *art* in the description of the day's experiences, but there is reference to art in the standards of evaluation which the children are learning to use as they comment on their mural. Art is also represented in the make-up of the school newspaper, in the arrangement of the room itself, in the displays, exhibits, collections, and the pictorial map. On some days subject matter is used more often and more intensively; on other days less intensively and less often depending upon children's needs and interests as individuals and as a group.

And there are byproducts of the school day to be reckoned with. There are many evidences of self-direction on the part of children—working as a committee group for 30-40 minutes without having to be directed every step of the way by the teacher, because they have done advance planning together; going from their own room to another part of the building without having to march in a straight line or to be supervised by a teacher; and being willing to take turns



"Now the rabbit in the story is a real rabbit."

and to enjoy looking on as well as participating. Children are competing with themselves and their own records rather than trying to beat other children—as they recite poems, work to master word forms and meanings, recognize need for certain skills, dance a square dance, draw a map, or judge the quality of a contribution to the school newspaper. Children are learning the working principles of democratic living as they discuss and plan their school day, discover the best way to solve a personal or group problem, plan how to produce a better school newspaper, share likes and dislikes in poetry, learn how to identify a word or manipulate a record player, how to work in groups, and other skills equally important in the democratic way of life.

What should these experiences of the children mean to parents and teachers?

These are all evidences that although a modern school program places children first in importance, the things they learn and how they learn them are given careful attention. There may be some who

believe with "Mr. Dooley" that it doesn't matter what you teach a child so long as he doesn't like it. They accuse modern education of placing too much emphasis on the child, too little emphasis on subjects as such, and none on the stern old "discipline" that produced good students and good citizens. But do regimentation and dictation really result in good learning? Take your own case; did you learn the skills you most need in school, or on the job, or through some other experience?

Today's teachers are using the experience method, and sincerely and honestly believe that it will produce the best educational program for girls and boys. The majority of teachers accept this principle of learning by doing as the core or center of the teaching process. Subject matter is organized without regard for strict subject lines. All the learning experiences that belong together when children study actual problems can be sorted out into reading, language, spelling, handwriting, arithmetic, health, science, history, geography, civics, art, music, and physical education, if this is necessary. Such problems may be any one of the following: How does our community get a pure water supply? Why did our great-grandfathers settle here? How do people in our community today earn a living? In what ways are children of other countries more like ourselves than different? How can we make our classroom a more interesting place in which to live 5 hours of each school day? How can I earn and save money for something I want to buy?

It is much more real to a child to think of a problem rather than a subject, and that is what the modern school tries to help him do through practical experiences for which he sees a need and a purpose. Problems are what he is up against every day of his life as he grows from a child into a high-school youth and then becomes an adult. These are not problems at the adult level, but problems as the child sees them and feels them. He should not carry on his shoulders burdens beyond his years.

Problems are not entirely sober and serious, but may involve fun and good times in their solution. Schools should be realistic. Teachers must teach for life as it is for the fourth-graders, who are young citizens today, and who are growing into an even more complex world which they are helping to shape for themselves.

Grateful acknowledgment is made to the following school systems for basic material, suggestions, or photographs: Glencoe, Ill.; Grand Rapids, Mich.; Hammond, Ind.; Milwaukee, Wis.; Minneapolis, Minn.; and Whittier College, Whittier, Calif.